

CLAIM AMENDMENTS

Claims 1-16 (cancelled)

Claim 17 (currently amended) ~~The hydrocyclone of Claim 16, A~~
hydrocyclone, comprising:

a separation chamber including an apex adapted to produce an
underflow discharge with a cone angle;

a splash skirt connected to the apex adapted to receive the
underflow discharge; and

a vibration sensor mounted on the splash skirt adapted to
produce an output signal indicative of a variation of the cone
angle of the underflow discharge;

wherein the vibration sensor produces an output signal
relative to a baseline threshold set to a level corresponding to
a magnitude of vibration produced by a normal impact of the
underflow discharge on the splash skirt.

Claim 18 (previously presented) The hydrocyclone of Claim 17,
wherein said normal impact corresponds to a pre-determined cone
angle.

Claim 19 (previously presented) The hydrocyclone of Claim 18,
wherein the vibration sensor is an ultrasonic sensor.

Claims 20-22 (cancelled)